

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-9 and 16-22 are presently pending in this application, Claims 10-15 having been canceled, Claims 1-9 having been amended, and Claims 16-22 having been newly added by the present amendment.

In the outstanding Office Action, Claims 1 and 4 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite; Claims 1-7, 9, 10, 12, 13 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by JP 0677148 (hereinafter "JP '148"); and Claims 8, 11 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '148 in view of Burkhart et al. (U.S. Patent 6,469,283).

First, Applicants acknowledge with appreciation the courtesy of interview granted to Applicants' representative and attorney on October 5, 2004. During the interview, the outstanding issues were discussed and the patentability of the claims was discussed in light of Applicants' disclosure. As a result of the interview, the Examiner indicated that the outstanding rejections based on JP '148 would be overcome if Claim 1 were amended to recite to the effect that the ceramic substrate has a single sintered body and that the heating elements are formed on the surface of the ceramic substrate. Accordingly, Claim 1 has been amended as presented above based on the discussions during the interview, and thus the outstanding art rejections are believed to be overcome.

With regard to the rejection under 35 U.S.C. §112, second paragraph, Claims 1-9 have been revised and amended to clarify the subject matter recited therein. Thus, Claims 1-9 are believed to be in compliance with the requirements of the statute.

Claims 1 and 4 have been further amended and Claims 16-22 have been newly added herein. These amendments and additions in the claims find clear support in the specification, claims and drawings as originally filed. For example, the amendments to Claim 1 is supported by page 28, lines 18-23, page 30, line 27, to page 33, line 10, page 44, line 9, to page 46, line 19, and Figures 1-3; Claim 4 by Figure 1; new Claims 16 and 17 by page 31, lines 19-24 and Figures 2, 3 and 5; Claim 18 by page 30, line 10-14, and page 46, line 9-13; new Claims 19 and 20 by Figures 2, 3 and 5, and page 44, lines 25-30; Claim 21 by page 29, lines 8-22; and new Claim 22 by page 27, line 24, to page 28, line 17. Hence, no new matter is believed to be added thereby. If the Examiner disagrees with any of the amendments and additions in the claims presented above, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually agreeable claim language and expedite the prosecution of the present application.

Briefly reiterating, Claim 1 as currently amended is directed to a ceramic heater including a ceramic substrate made of a single sintered body, the ceramic substrate having a disk shape and an overall thickness of approximately between 0.5 mm and 5 mm, the ceramic substrate having a heating surface and a bottom surface on an opposite side of the heating surface, the heating surface being configured to face a semiconductor wafer, the bottom surface having an inner portion and a peripheral portion therein, a first heating device comprising a plurality of resistance heating elements formed on the bottom surface of the ceramic substrate in the peripheral portion, and a second heating device comprising a plurality of resistance heating elements formed on the bottom surface of the ceramic substrate in the inner portion. Applicants wish to point out that by providing the first and second heating device as such, *i.e.*, on the bottom surface, rather than inside, of the ceramic substrate, the ceramic substrate considerably reduces the effect of thermal expansion of the resistance

heating elements and better withstands temperature difference between the inner portions and peripheral portions. Furthermore, since the resistance heating elements is not embedded inside the ceramic substrate, the ceramic substrate is made significantly thinner and thus improves thermal conductivity and heating efficiency.¹ Because none of the cited references discloses the ceramic substrate and first and second heating device as recited in amended Claim 1, the structure recited in amended Claim 1 is not anticipated by or rendered obvious from these cited references.

For the foregoing reasons, amended Claim 1 is believed to be allowable. Furthermore, since Claims 2-9 and 16-22 ultimately depend from Claim 1, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2-9 and 16-22 are believed to be allowable as well.

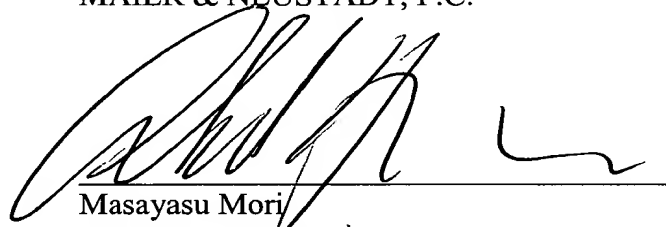
Finally, in the specification, informalities have been corrected herein. In particular, the word “diameter” on page 3, lines 4, 27 and 30, has been replaced with “radius” as described and thus supported by page 10, lines 24-25, and page 45, lines 5-6, of the specification, and the paragraph on page 44, lines 25-30, has been corrected in consist with Figures 2, 3 and 5.

¹ Specification, page 28, lines 18-23.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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